

# Science 9

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Teacher: Mr. Birrell      Period 4      Room

## Course Content

### Atoms and Elements

- Distinguish between physical and chemical properties of common substances, including those found in household, commercial, industrial, and agricultural applications.
- Analyze historical explanations of the structure of matter.
- Demonstrate an understanding of the classification of pure substances (elements and compounds), including the development and nature of the Periodic Table.

### Characteristics of Electricity

- Demonstrate and analyze characteristics of static electric charge and current electricity, including historical and cultural understanding.
- Analyze the relationships that exist among voltage, current, and resistance in series and parallel circuits.
- Assess operating principles, costs, and efficiencies of devices that produce or use electrical energy.

### Reproduction and Human Development

- Examine the process of and influences on the transfer of genetic information and the impact of that understanding on society past and present.
- Observe and describe the significance of cellular reproductive processes, including mitosis and meiosis.
- Describe the processes and implications of sexual and asexual reproduction in plants and animals.
- Analyze the process of human reproduction, including the influence of reproductive and contraceptive technologies.

### Exploring Our Universe

- Inquire into the motion and characteristics of astronomical bodies in our solar system and the universe.
- Analyze scientific explanations of the formation and evolution of our solar system and the universe.
- Examine how various cultures, past and present, including First Nations and Métis, understand and represent astronomical phenomenon.
- Analyze human capabilities for exploring and understanding the universe, including technologies and programs that support such exploration.

## Evaluation

Assignments\Labs\Quizzes	45%
Unit Exams	40%
Course Finalization (Final Exam)	15%

## Resources

Class wiki: <http://mrbirrell.wikispaces.com/>

## Expectations

1. Be on time. Have your books open and ready to go.
2. Have all materials present and ready to use. This includes your agenda, pencils, eraser, and calculator.
3. Raise your hand to ask/answer questions.
4. Use class time wisely to complete work.
5. Do not disrupt presentations or work time.
6. Do not be afraid to ask a question.
7. Write neatly so that the teacher can read it without trouble.
8. We will use computers periodically. Use the computers appropriately. Do not download any software. You will lose your computer privileges.
9. Follow school policy in regards to dress, attendance, and conduct.
10. If you are absent, it is your responsibility to find out the material you missed. You may ask the teacher, a classmate, or check the binder. Assigned homework will be due the following day.

## Daily Routine

When you enter the classroom, complete the bellwork and follow any instructions on the board. At the beginning of the class there will be a short question and answer period about previously covered material. The rest of the class will consist of the presentation of new material and work time. Homework checks can occur at any time.

## Materials

For this class you will need pencils, erasers, loose leaf paper, a ruler, calculator, and a binder.

## Missed Evaluations

All missed evaluations will receive an “Incomplete” until they have been completed. Missed evaluations will be completed at the convenience of the teacher on an individual basis. Generally, missed exams will be written on the day the student returns to school.

## Late Assignments

Late assignments will be accepted up the assignment has been handed back to the class. There will be a penalty of 10% per day. If you fail to hand in the assignment before it is returned to the class, you will receive an “Incomplete”.

## Progress Reports

Progress reports will not be handed out or e-mailed home. Check HomeLogic for your current grade.

## Course Finalization